

## RECOVERY OF CONTINENCE FUNCTION IN PATIENTS AFTER RADICAL RETROPUBIC NERVE-SPARING PROSTATECTOMY.

### Hypothesis / aims of study

Urinary incontinence (UI) as a complication after radical retropubic prostatectomy (RPE) has a profound impact on patient quality of life. The role of nerve-sparing (NS) technique is still controversial.

### Study design, materials and methods

We evaluated a consecutive series of 209 patients, from 2007 till 2010, who underwent open RPE. They were divided into 2 groups ( $p > 0.05$ ). In the 1st group ( $n = 106$ , average age  $58.08 \pm 5.84$ , PSA median  $8.93$  ng/ml, erectile function domain (EF) to International Index of Erectile Function (IIEF)  $26.35 \pm 4.14$ ) the patients underwent RPE using uni- or bilateral NS technique; in the 2 group ( $n = 103$ , average age  $60.37 \pm 5.22$ , PSA median  $10.07$  ng/ml, EF to IIEF  $17.89 \pm 3.73$ ) the NS technique was not applied. Urine continence was defined as the absence of urinary leakage with the possible usage of 1 pad per day. Grade I stress UI - usage of 1-2, grade II – 3, grade III – more than 3 pads per day. Potency recovery was defined as ability to achieve and maintain an erection suitable for sexual intercourse with/without phosphodiesterase type 5 inhibitors.

### Results

In a month after the removal of urethral catheter in the 1st group the continence was attained at 57.8% patients, in the 2nd group – at 20.7%. One year after surgery 97.3% and 90.4% patients were continent in group 1 and 2. Only grade I stress UI was found in 2.7% and 9.6% patients in group 1 and 2 ( $p < 0, 05$ ). No patient had grade II and III stress UI. In group 1 one year after surgery potency recovery rate was 64.8% in men with bilateral NS-RPE and 40.7% in men with unilateral one.

### Interpretation of results

In whole in group 1 the weak negative correlation was revealed between potency and urine continence recovery ( $r = - 0.2$ ). But in patients with potency recovery the moderate negative correlation was revealed ( $r = - 0.6$ ).

### Concluding message

The incidence of stress UI after NS-RPE is lower than in non-nerve-sparing one. Besides this, recovery of urine continence is highly associated with a potency recovery rate (NS technique). Therefore, nerve-sparing should be attempted in all patients if the principles of oncological surgery are not compromised.

### Disclosures

**Funding:** no disclosures **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Local Ethics Committee of Russian Medical academy of Postgraduate Education **Helsinki:** Yes **Informed Consent:** Yes